

To: Koglin, Eric[Koglin.Eric@epa.gov]; Sayles, Gregory[Sayles.Gregory@epa.gov]
Cc: Kavlock, Robert[Kavlock.Robert@epa.gov]
From: Orme-Zavaleta, Jennifer
Sent: Fri 8/14/2015 7:12:49 PM
Subject: RE: remote sensing response to Gold King Mine spill into the Animas River

These are EPA resources.

Sent from my Windows Phone

From: [Koglin, Eric](#)
Sent: 8/14/2015 15:10
To: [Sayles, Gregory](#)
Cc: [Orme-Zavaleta, Jennifer](#); [Kavlock, Robert](#)
Subject: RE: remote sensing response to Gold King Mine spill into the Animas River

Hey Greg

Yes, I spoke with Blake about the possibility of accessing NASA.

We raised the availability of this asset as well as that of the USGS. The EOC was satisfied with the ASPECT support they were receiving and did not want to engage NASA or USGS at this time.

Eric

From: Sayles, Gregory
Sent: Friday, August 14, 2015 11:55 AM
To: Koglin, Eric
Subject: Fwd: remote sensing response to Gold King Mine spill into the Animas River

You spoke with Blake earlier this week, right?

Gregory Sayles

EPA's Homeland Security Research

513-569-7607 desk-513-305-9984 cell

Begin forwarded message:

From: "Orme-Zavaleta, Jennifer" <Orme-Zavaleta.Jennifer@epa.gov>

Date: August 14, 2015 at 2:07:40 PM EDT

To: "Sayles, Gregory" <Sayles.Gregory@epa.gov>, "Kavlock, Robert" <Kavlock.Robert@epa.gov>

Subject: FW: remote sensing response to Gold King Mine spill into the Animas River

See below and let me know what you think

Sent from my Windows Phone

From: [Neale, Anne](#)

Sent: 8/14/2015 14:01

To: [Orme-Zavaleta, Jennifer](#); [McDonald, Michael E.](#)

Subject: FW: remote sensing response to Gold King Mine spill into the Animas River

Hi Jennifer and Mike,

You may already have spoken to Blake or others but Taylor brings up a really great point about remote sensing capabilities.

Annie

Anne Neale

EnviroAtlas Project Lead

US EPA, RTP, NC

919-541-3832

From: Jarnagin, Taylor

Sent: Friday, August 14, 2015 1:42 PM
To: Neale, Anne
Subject: remote sensing response to Gold King Mine spill into the Animas River
Importance: High

Hi Annie,

I think this is an excellent candidate for the use of remote sensing with a multispectral or hyperspectral sensor to identify and map the sediments from the Gold King Mine spill into the Animas River.

Our local talent includes: Blake Schaeffer and Drew Pilant (both of whom could analyze imagery) and David J. Williams (who is working on putting together a sensor just for this type of occasion, unfortunately, I don't think that sensor has been fully tested and is operation right now). The Environmental Photographic Interpretation Center existed for exactly this sort of emergency response capability and to act as a liaison between the contractors who would fly and analyze the imagery and the Regions who had the boots on the ground and were directly responsible for the clean-up.

Our current contact for the capability to do this is:

H. Craig Seaver

Remote Sensing Manager

EPA National Computer Center

Office of Technology Operations and Planning

Office of Environmental Information

Phone: (919) 541-4436

Email: seaver.craig@epa.gov

Taylor

S. Taylor Jarnagin, Ph.D.

Research Ecologist

EPA Landscape Ecology Branch

Environmental Sciences Division

USEPA/ORD National Exposure Research Laboratory

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Web Site:

< <http://www.epa.gov/nerlesd1/land-sci/staff/jarnagin.htm> >

Main Research Project:

"Collaborative Research: Streamflow, Urban Riparian Zones, BMPs, and Impervious Surfaces":

< <http://www.epa.gov/nerlesd1/land-sci/clarksburg01-05.htm> >